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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,654	04/14/2004	Yoshio Terada	Q81096	4963

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WASHINGTON, DC 20037-3213

EXAMINER	
DOUYON, LORNA M	
ART UNIT	PAPER NUMBER
1796	

NOTIFICATION DATE	DELIVERY MODE
06/29/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/823,654	TERADA ET AL.	
	Examiner	Art Unit	
	Lorna M. Douyon	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 May 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *5,8,9,11-16,20 and 23* is/are pending in the application.

4a) Of the above claim(s) *11-16* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *5,8,9,20 and 23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/17/10*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. This action is responsive to the amendment filed on May 3, 2010.

2. Claims 5, 8-9, 11-16, 20 and 23 are pending. Claims 1-4, 6-7, 10, 17-19, 21-22 are canceled. Claims 11-16 are withdrawn from consideration as being drawn to a nonelected invention.

3. Claims 5, 8-9, 20 and 23 **stand** rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 14 of U.S. Patent No. **7,575,790** in view of Namikawa for the reasons set forth in the previous office action.

4. Claims 5, 8-9, 20 and 23 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Terada et al. (WO 03/052045), hereinafter "Terada" in view of Namikawa et al. (WO 02/05975), hereinafter "Namikawa" for the reasons set forth in the previous office action and which is repeated below for Applicants' convenience.

Terada teaches a cleaning label which comprises a cleaning layer **3** and a release film **4** provided on one side of a backing **2** and an ordinary adhesive layer **5** provided on the other side of the backing **2** and is peelably provided on the separator **1** with this adhesive layer **5** interposed therebetween**;** and in operation, the cleaning label is peeled off the separator **1**, and then stuck to a conveying member such as semiconductor wafer (see page 29, lines 9-23, Figures 1 and 2). The cleaning layer is not specifically limited in its material, however, a material which has cured by an

activation energy source such as ultraviolet rays and heat to have a three-dimensionally networked molecular structure that gives a lowered adhesion is preferably used, for example, the 180° peel adhesion with respect to silicon wafer is 0.20 N/10 mm or less (see page 19, line 24 to page 20, line 8; page 27, lines 13-16). The tensile modulus of the cleaning layer is 10 MPa or more (see page 20, line 25 to page 21, line 3; page 31, lines 6-9). The cleaning layer comprises a compound having one or more unsaturated double bonds per molecule incorporated in a pressure-sensitive adhesive polymer is preferred (see page 21, lines 15-18). Example of such pressure-sensitive adhesive polymer is an acrylic polymer comprising as a monomer a (meth)acrylic acid and/or (meth)acrylic acid ester (see page 21, lines 19-22). The backing for the cleaning layer is not specifically limited. (see page 24, lines 18-21). The release film (i.e., protective film) is treated with a silicone-based releasing agent and is laminated as a separator, wherein the amount of silicone attached to said cleaning layer when the separator is peeled off said cleaning layer is 0.005 g/m^2 or less as calculated in terms of polydimethylsiloxane (see page 6, line 19 to page 7, line 9; page 8, lines 13 to page 10, line 21). The release film to be used in the protection of the cleaning layer may be a film made of polyethylene, polypropylene, polybutene, polybutadiene or polymethylpentene (see page 27, lines 21-24), which has been release-treated with a silicone-based releasing agent, a long-chain alkyl-based releasing agent, a fluorine-based releasing agent, an aliphatic acid amide-based releasing agent or a silica-based releasing agent (see page 28, lines 4-8). Terada, however, fails to specifically disclose a cleaning layer comprising a polyimide resin, wherein each of the relative intensities of the recited

fragment ions in the cleaning layer, when the protective film is peeled off the cleaning layer, is 0.1 or less.

Namikawa, an analogous art, teaches that a cleaning layer is not particularly limited, and as particular examples, in addition to the material obtained by causing the compound, that has one unsaturated double bond or more in the molecule, to contain into the pressure-sensitive adhesive polymer, there may be employed preferably rubbers, natural resins, synthetic resins such as polyethylene terephthalate, phenol resin, polyester resin, alkyd resin, epoxy resin, polycarbonate, cellulose nitrate, poly(vinylidene fluoride), polypropylene, polyimide, nylon 6, nylon 66, poly(methyl methacrylate), methyl methacrylate/styrene copolymer, ethylene fluoride/propylene copolymer, etc. (see page 5, line 19 to page 6, line 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the cleaning layer comprising (meth)acrylic acid of Terada with a cleaning layer comprising polyimide resin because the substitution of art recognized equivalents as shown by Namikawa is within the level of ordinary skill in the art. In addition, simple substitution of one known element for another would achieve the predictable result of providing an effective cleaning layer which causes no contamination on the conveying site. In addition, it would also have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect each of the relative intensities of the recited fragment ions in the cleaning layer, when the protective film is peeled off the cleaning layer, to be within those recited, i.e., 0.1 or less, because Terada teaches on page 6, line 19 to page 7, line 9; page 8, lines 13 to page

10, line 21 that the amount of silicone attached to said cleaning layer when the separator is peeled off said cleaning layer is 0.005 g/m^2 or less, as calculated in terms of polydimethylsiloxane, hence, such amount would be equivalent to those recited.

Response to Arguments

5. Applicants' arguments filed May 3, 2010 have been fully considered but they are not persuasive.

With respect to the obviousness rejection based upon Terada in view of Namikawa, Applicants argue that there is no motivation for one of ordinary skill in the art to substitute the material used as the cleaning layer of Terada, and thus one of ordinary skill in the art would not arrive at the claimed invention. In addition, Applicants argue that Namikawa teaches various materials throughout the disclosure that can be used as the cleaning layer, and the Examiner has failed to identify a reason to select polyimide from the various materials. Applicants then argue that since Terada does not disclose the use of polyimide and since Namikawa neither contains an Example where polyimide is used nor mentions silicone, it is submitted that one of ordinary skill in the art would not reasonably expect each of the relative intensities of the recited fragment ions in the cleaning layer to be within the claimed ranges.

The Examiner respectfully disagrees with the above arguments because even though Terada does not specifically disclose a cleaning layer comprising a polyimide resin, rather, a cleaning layer comprising an acrylic polymer comprising as a monomer a (meth)acrylic acid and/or (meth)acrylic acid ester (see page 21, lines 19-22), Namikawa,

an analogous art, teaches that in addition to the material obtained by causing the compound, that has one unsaturated double bond or more in the molecule, to contain into the pressure-sensitive adhesive polymer, there may be employed preferably rubbers, natural resins, synthetic resins such as polyethylene terephthalate, phenol resin, polyester resin, alkyd resin, epoxy resin, polycarbonate, cellulose nitrate, poly(vinylidene fluoride), polypropylene, polyimide, nylon 6, nylon 66, poly(methyl methacrylate), methyl methacrylate/styrene copolymer, ethylene fluoride/propylene copolymer, etc. (see page 5, line 19 to page 6, line 8). Hence, as stated in the previous office action, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the cleaning layer comprising (meth)acrylic acid of Terada with a cleaning layer comprising polyimide resin because the substitution of art recognized equivalents as shown by Namikawa is within the level of ordinary skill in the art. In addition, simple substitution of one known element for another would achieve the predictable result of providing an effective cleaning layer which causes no contamination on the conveying site. In the alternative, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated polyimide into the cleaning layer of Terada because it is known from Namikawa that in addition to the recited pressure-sensitive polymers, there may be employed other polymers like polyimide so that foreign matters caused by static electricity can be caught and adsorbed as disclosed on page 5, line 6 to page 6, line 8.

With respect to the argument that Namikawa does not disclose an Example of a cleaning layer comprising polyimide resin, please note that a reference is not limited to

the working examples, see *In re Fracalossi, 215 USPQ 569* (CCPA 1982). In addition, non-preferred embodiments can be indicative of obviousness, see *Merck & Co. v. Biocraft Laboratories Inc*. 10 USPQ 2d 1843 (Fed. Cir. 1989); *In re Lamberti*, *192 USPQ* 278(CCPA 1976); *In re Kohler,* 177 *USPQ* 399.

With respect to the obviousness-type double patenting rejection over US 7,575,790 in view of Namikawa, Applicants traverses the rejection for the reasons set forth above.

The response above applies here as well. The obviousness-type double patenting rejection is maintained until such time Applicants submit a timely filed terminal disclaimer.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to 3 whose telephone number is 571-272-1313. The examiner can normally be reached on Mondays-Fridays 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorna M Douyon/
Primary Examiner, Art Unit 1796